# Remarks

Reconsideration and reexamination of the above-identified patent application, as amended, are respectfully requested. Claims 1-20 are pending in this application upon entry of this Amendment. In this Amendment, the Applicant has amended claims 1, 4-6, 9-13, and 16-20. No claims have been cancelled or added in this Amendment. Of the pending claims, claims 1, 9, 16, and 18 are the only independent claims.

## *Double Patenting*

In the Office Action mailed September 7, 2004, the Examiner provisionally rejected claims 1-15 and 19 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-26 of copending application serial no. 09/750,928.

In response, the Applicant has filed herewith a terminal disclaimer in compliance with 37 C.F.R. § 1.321(c) in order to overcome the provisional rejection of claims 1-15 and 19. Accordingly, the Applicant respectfully requests reconsideration and withdrawal of the rejection to the claims based on the judicially created doctrine of obviousness-type double patenting.

## *Claim Rejections - 35 U.S.C. 112*

The Examiner rejected claims 10 and 16-20 under 35 U.S.C. § 112, 2$^{nd}$ paragraph, as being indefinite. With respect to claim 10, the Examiner indicated that the phrase "the security mechanism" lacks antecedent basis. The Applicant has amended claim 10 to provide the proper antecedent basis.

With respect to claim 16, the Examiner indicated that in the "wherein" clause it is not clear as to what element/component is the one that needs the base module in order to function. The Applicant has amended claim 16 to remove the noted wherein clause.

Also with respect to claim 16, the Examiner indicated that it is not clear how it is possible that the second storage library is available so that it can be associated with the base module. The Examiner noted that the preamble has been set forth to claim that the method is *of upgrading* from a first storage library to a second storage library, which preamble indicated that the second storage library cannot be available until all of the steps have been carried out. In response, the Applicant has amended claim 16 to make it more clearer that the method is of upgrading *a storage library*.

Further with respect to claim 16, the Examiner indicated that the body of the claim does not support the preamble of the claim. The Examiner noted that (a) in the preamble (i) the base module is said to be needed to be associated with a storage library in order to function and (ii) the hardware component of the second storage library is to operate, (b) but in the body of the claim: (iii) the disassociating step disassociates the base module from the second storage library. The Examiner noted that if the base module is disassociated from the second storage library, then it appears that the second storage library cannot function since the preamble states that the base module is needed to be associated with a storage library in order to function. In conclusion, the Examiner indicated that the claim must be amended to avoid the inoperativeness problem, which problem the Examiner did not reject under 35 U.S.C. § 101 at this time since it just may be a problem of confusion rather than inoperativeness. In response, the Applicant has amended claim 16 to address the Examiner's noted concerns.

With respect to claims 17-18, the Examiner indicated that the recitations of these claims do not cure the problems of indefiniteness in claim 16. As indicated above, the Applicant has amended claim 16 to cure the noted indefiniteness problems.

With respect to claim 19, the Examiner indicated that the purpose for which the first associating step and the disassociating step are recited is not clear since the disassociating step would reverse the associating step. In response, the Applicant has amended claim 19 to remove the noted disassociating step.

With respect to claim 20, the Examiner indicated that the recitation of this claim does not cure the problems of indefiniteness in claim 19. As indicated above, the Applicant has amended claim 19 to cure the noted indefiniteness problem.

In view of the noted amendments made to claims 10, 16, and 19, the Applicant respectfully requests reconsideration and withdrawal of the rejection to the claims under 35 U.S.C. § 112, 2nd paragraph.

## *Claim Rejections - 35 U.S.C. § 103*

The Examiner rejected claims 1-16 and 18-19 under 35 U.S.C. § 103(a) as being obvious over Applicant's admitted prior art ("the admitted art") in view of U.S. Patent No. 6,058,478 issued to Davis ("Davis"). The Applicant believes that the claimed invention is patentable over any combination of the admitted prior art and Davis and has amended independent claims 1, 9, 16, and 19 to more clearly define thereover.

### 1.    The Claimed Invention

Amended independent claims 1 and 9 recite a method and an associated system of upgrading a storage library. As recited in amended independent claim 1, the method includes providing with a storage library a hardware component which has requisite hardware elements used for running the component either at low or high operating levels. The amount of the requisite elements used for running the component at the high operating level is greater than the amount of the requisite elements used for running the component at the low operating level. The component is set to run at the low operating level until an upgrade module having

permission instructions for the component to run at the high operating level is associated with the library. An upgrade module having the permission instructions for the component to run at the high operating level is then associated with the library. The component is enabled to run at the high operating level in response to the upgrade module being associated with the library thereby upgrading the library.

Amended independent claim 16 recites another method of upgrading a storage library. This method includes associating a base module with a storage library provided with a first storage frame having a first storage capacity. The base module has permission instructions for the library to operate at the first storage capacity. The permission instructions of the base module are then accepted by the library such that the library operates at the first storage capacity upon the base module being associated with the library. The first storage frame is then replaced with a second storage frame having a second storage capacity greater than the first storage capacity. An upgrade module having permission instructions for the library to operate at the second storage capacity instead of the first storage capacity is then prompted to be associated with the library in response to recognizing the permission instructions of the base module for the library to operate at the first storage capacity after the first storage frame has been replaced with the second storage frame. The upgrade module is then associated with the library and the permission instructions of the upgrade module are accepted by the library such that the library operates at the second storage capacity upon the upgrade module being associated with the library after the first storage frame has been replaced with the second storage frame.

Amended independent claim 19 recites another method of upgrading a storage library which is generally similar to the method set forth in amended independent claim 1 but recites the use of a base module.

## 2.    The Admitted Art

As set forth in the Background Art section of the Applicant's specification, the admitted art includes storage libraries in a product line having a common base unit with differing options.  Noted examples of the different options that a given one of the plurality of storage libraries making up the product line include: type and capacity of cartridge storage space (e.g., 10 vs. 20 cartridge storage capability); type and amount of media players (advanced vs. basic media players); robot mechanism capability (single vs. multiple robot mechanisms).

Accordingly, as an example, the admitted art  teaches that the storage libraries making up a product line may have the following hardware features:

|  | 1st Library | 2nd Library | 3rd Library | 4th Library |
|---|---|---|---|---|
| # of Storage Cartridges | 10 | 20 | 20 | 10 |
| # of Robot Mechanisms | 1 | 1 | 2 | 2 |

That is, the admitted art teaches that storage libraries making up a product line may have differing hardware features.  The admitted art further teaches that the hardware features of a particular storage library can be upgraded.  For example:

| 1st Library | Before Upgrade | After Upgrade |
|---|---|---|
| # of Storage Cartridges | 10 | 20 |

Typically, the upgrading of the hardware features of a storage library require field installs into the storage library of different or additional hardware.  For instance, in the noted example, the # of storage cartridges of the 1st library would be upgraded from 10 to 20 by at least physically removing a storage frame having 10 cells from the 1st library and then physically inserting a storage frame having 20 cells into the 1st library.

In essence, the admitted art teaches that a given storage library has a given hardware component for operating at a given operating level. If it is desired to upgrade the storage library to operate at a higher operating level, then the given hardware component either needs to be modified to replicate a hardware component which can operate at the higher operating level or needs to be replaced by such a hardware component.

As such, unlike the claimed invention as set forth in amended independent claims 1, 9, and 19, the admitted art is void of teaching or suggesting the idea of originally providing the 1$^{st}$ library of the noted example with a 20 cell storage frame instead of a 10 cell storage frame and initially setting the 1$^{st}$ library to function as if it had the 10 cell storage frame instead of the 20 cell storage frame (i.e., to function using only 10 cells of the 20 cell storage frame) when the 1$^{st}$ library is manufactured and then subsequently enabling the 1$^{st}$ library to function using all 20 cells of the 20 cell storage frame.

### 3.    Davis

Davis generally teaches a hardware component [i.e., cryptographic component] that is capable of operating at low and high operating levels [lower and higher security levels {e.g., 40 bits-level and 56 bits-level}], which operation levels can be modified/upgraded with permission instructions [i.e., update message].

### 4.    The Claimed Invention Compared to the Admitted Art and Davis

The claimed invention as recited in amended independent claims 1, 9, and 19 generally differs from any combination of the admitted art and Davis in that a hardware component which has requisite elements used for running the component either at low or high operating levels with the amount of the elements used for the high operating level being greater than the amount of the elements used for the low operating level is provided with a storage library and that the component is initially enabled to run at the low operating level and is then

enabled to run at the high operating level upon an appropriate upgrade module being associated with the storage library.

The claimed invention as recited in amended independent claim 16 generally differs from any combination of the admitted art and Davis in that a storage library is upgraded to operate at a given storage level upon an upgrade module being associated with the storage library after a new storage frame having the given operating level has replaced an original storage frame having a different storage level in the storage library.

Therefore, the Applicant believes that amended independent claims 1, 9, 16, and 19 are patentable under 35 U.S.C. § 103(a) over any combination of the Admitted Art and Davis. Claims 2-8, 10-15, 17-18, and 20 depend from one of the amended independent claims and include the limitations thereof. Thus, the Applicant respectfully requests reconsideration and withdrawal of the rejection to the claims under 35 U.S.C. § 103(a).

## CONCLUSION

In summary, claims 1-20, as amended, meet the substantive requirements for patentability. The case is in appropriate condition for allowance. Accordingly, such action is respectfully requested.
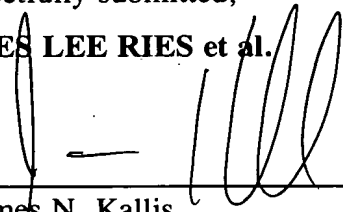
If a telephone or video conference would expedite allowance or resolve any further questions, such a conference is invited at the convenience of the Examiner.

Respectfully submitted,

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By_____

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